

Pacific Power – HB 4036 Analysis

Presented to:

House Energy and Environment Committee



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Let's turn the answers on.

Executive Summary

- Under Initiative 63, removing coal from Oregon rates would cost Pacific Power's Oregon customers approximately \$325 million to \$650 million. In contrast, under HB 4036, removing coal from Oregon rates by 2030 has limited impacts on customer rates, largely because HB 4036:
 - Allows flexibility to smooth rate impacts by better aligning renewable procurement with the removal of coal-fueled generation resources from Oregon customer rates; and
 - Allows flexibility for new renewable resources to take advantage of transmission capacity opened up by retiring coal plants.

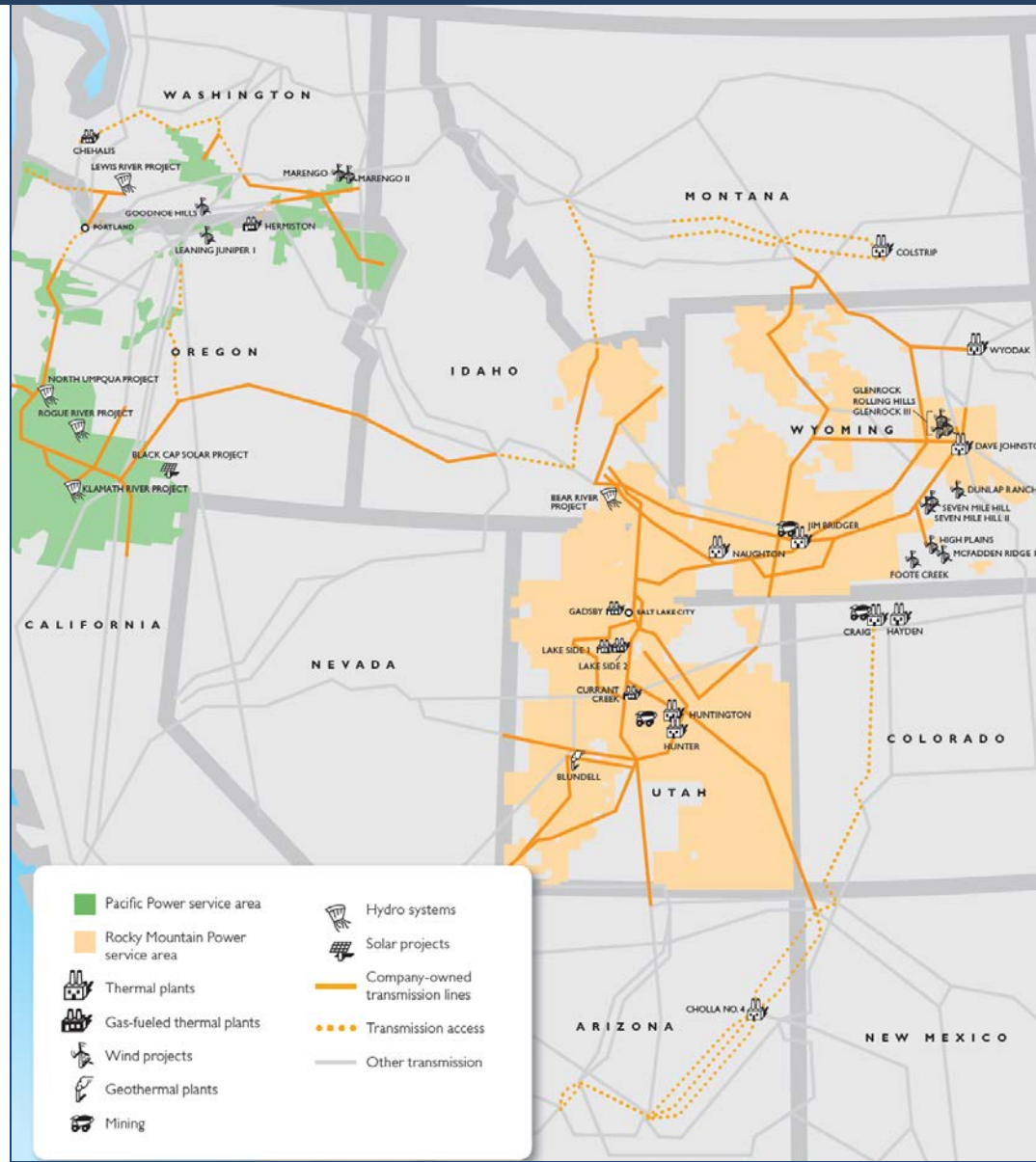
- Compared to Oregon's current renewable portfolio standard, which was established in SB 838 (2007), HB 4036 reduces Pacific Power's Oregon-allocated carbon emissions through 2040 by 35 million tons.

- Current forecasts show that for new generation resources, renewable resources (both wind and solar) are about 20 percent less expensive than natural gas alternatives, making renewable resources the economically preferred choice for resource replacement. The difference will be more pronounced if natural gas prices rise off historic lows.

- Initiative 63 creates a disincentive to take early action by limiting banking of renewable resource credits (REC). In contrast, HB 4036 incentivizes early action through its REC banking provision, which allows utilities and customers to benefit from recently extended federal tax credits. HB 4036 enables at least 225 MW of additional low-cost renewable procurement over the near-term.

- Evaluation of reliability and operational impacts shows that Pacific Power can integrate nearer-term renewable resources with existing generation resources and transmission infrastructure. Integration of renewable resources in the outer years of the planning horizon could be accomplished through effective grid management and by using emerging storage technologies.

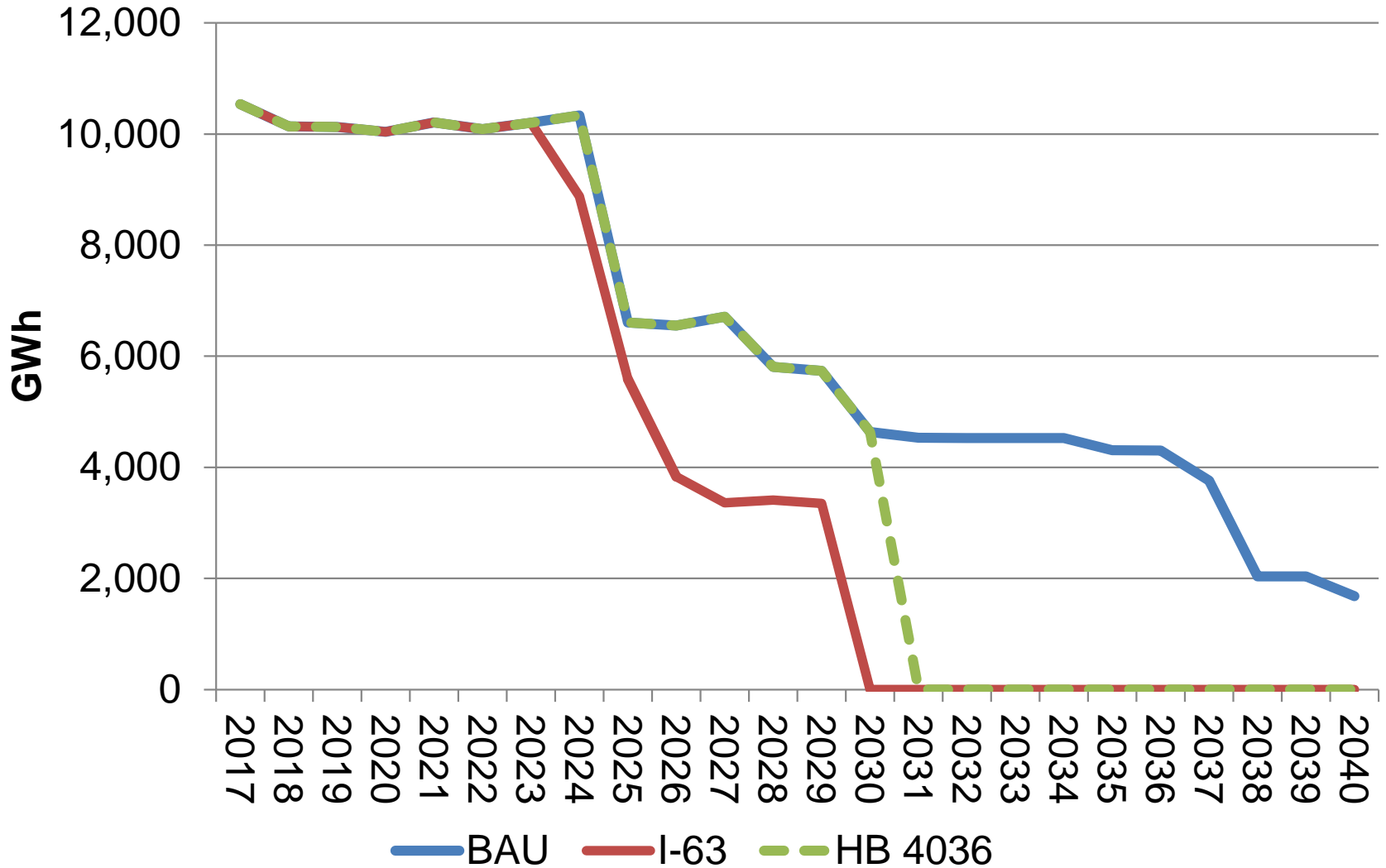
PacifiCorp Territory and Generation



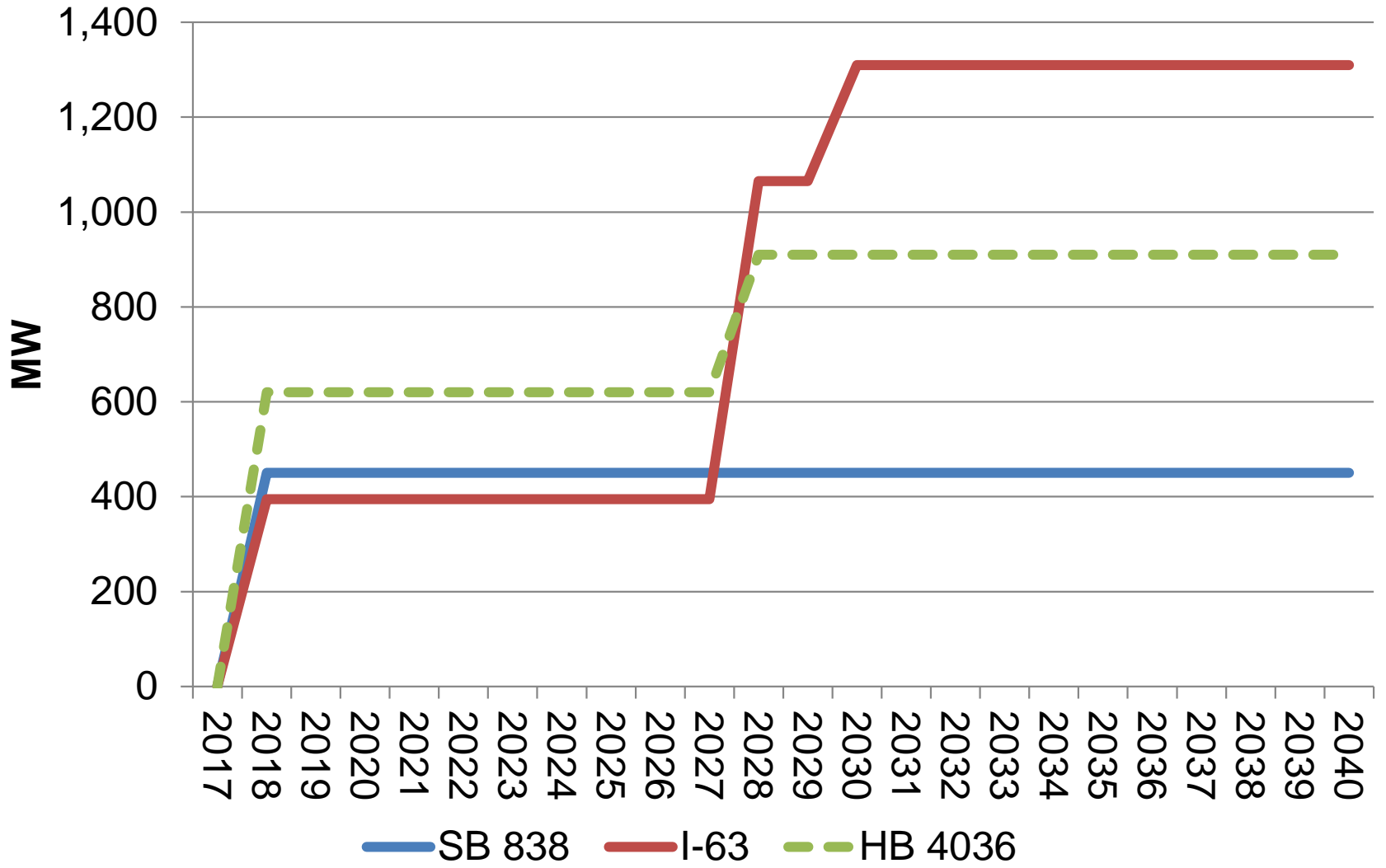
Pacific Power Service Territory



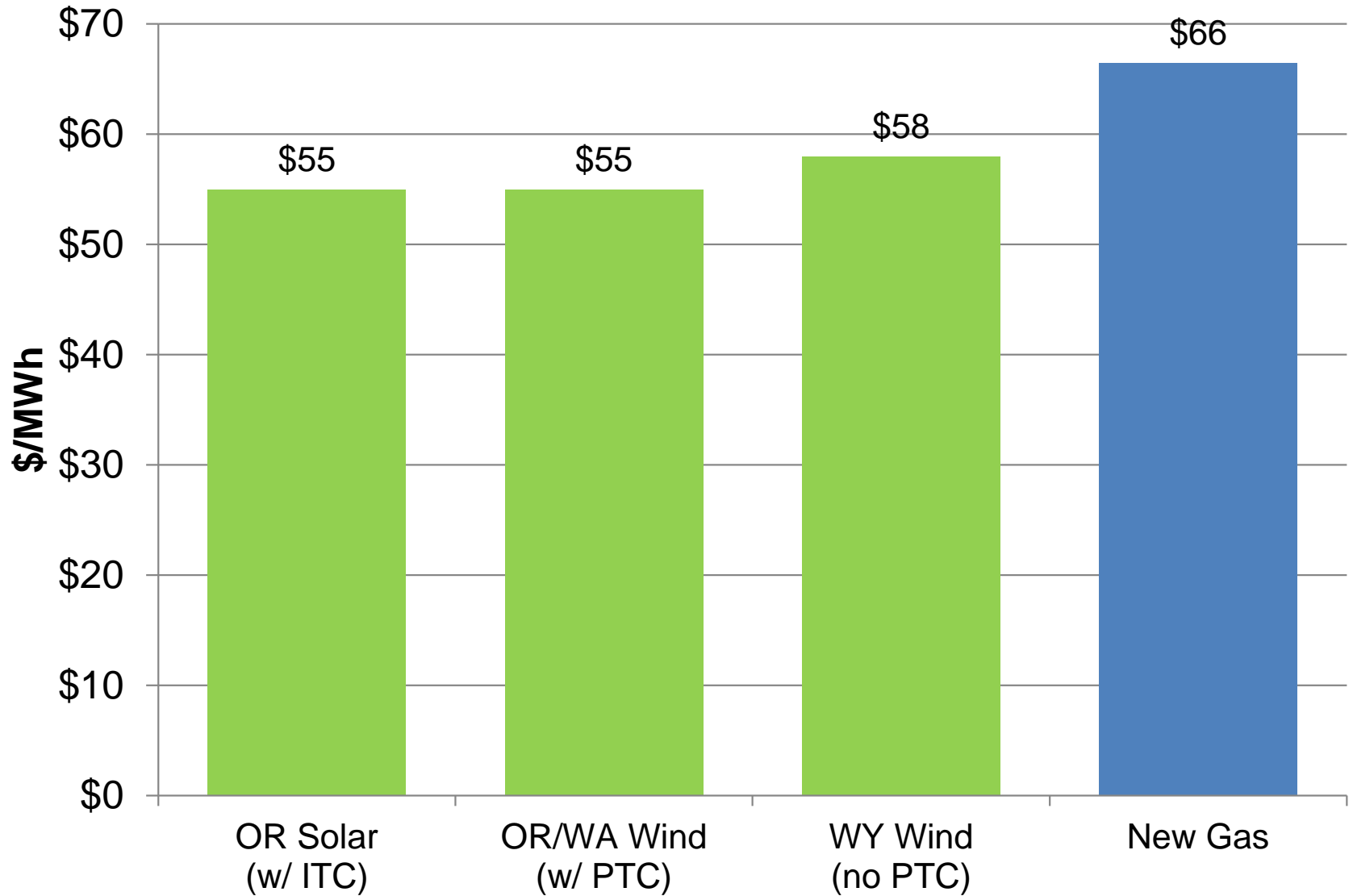
Pacific Power Oregon-Allocated Coal Generation



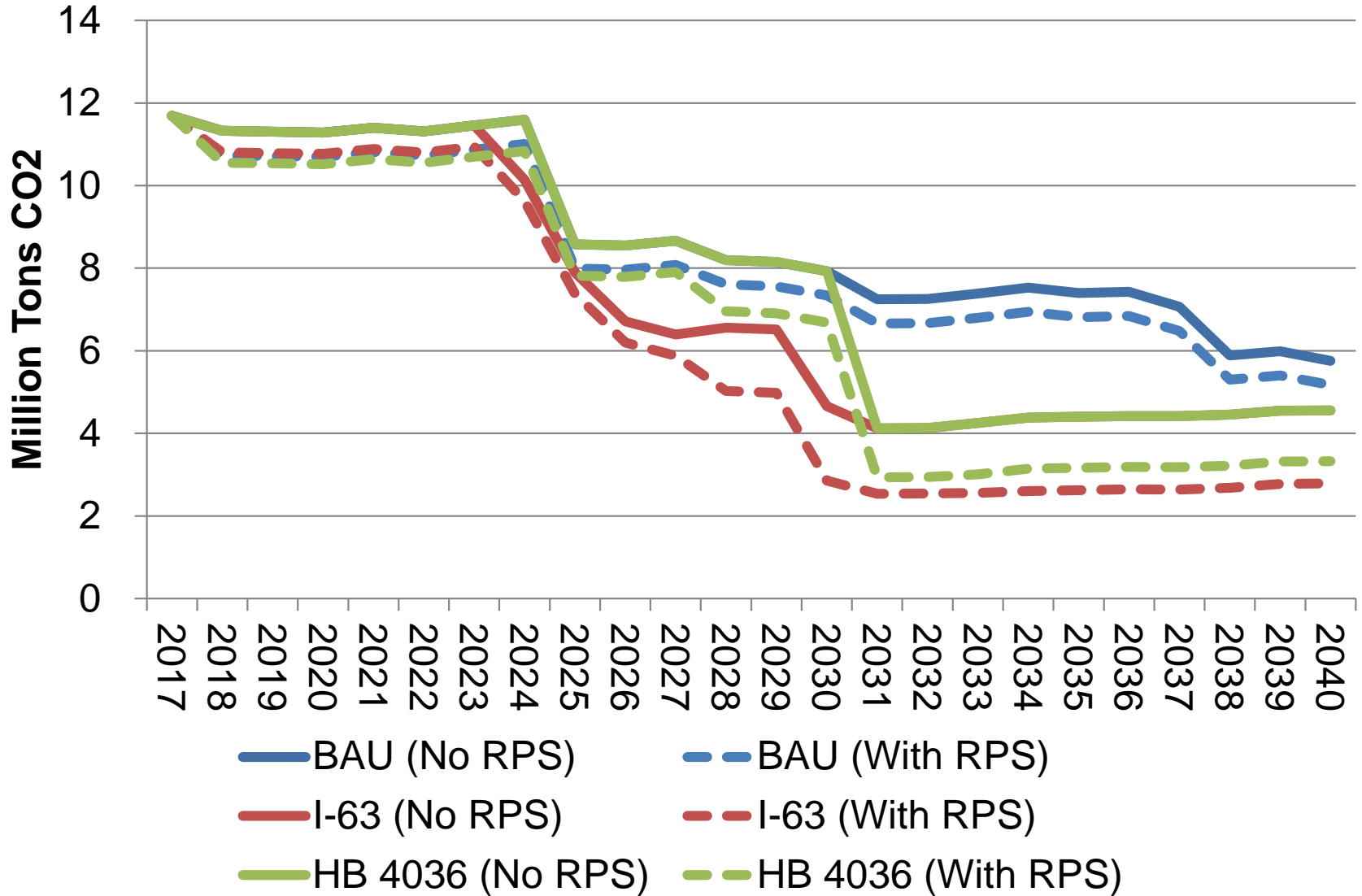
Pacific Power Oregon Incremental RPS Compliance



New Resource Costs



Emissions Allocated in Oregon Rates



Reliability and Operational Impacts

- Under HB 4036, Pacific Power can manage nearer term renewable resources with existing generation and transmission infrastructure.
- Pacific Power's 2015 Integrated Resource Plan shows that the system is capable of providing additional balancing reserves for renewable integration.
- In the longer term, the company believes there are ways to manage integration of new renewable resources through effective grid management and use of storage technologies.
- Flexibility on the timing of new resources and geographic location provides for thoughtful system planning and investment.
- In addition, HB 4036 includes a provision that would allow the Public Utility Commission of Oregon to temporarily suspend the requirement of a utility to meet the RPS if meeting the RPS would conflict with grid reliability.

Questions?



Let's turn the answers on.